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ABSTRACT

The purpose of this plan is to minimize the potential for disaster and to minimize damage to materials if a disaster should occur. It contains: emergency instructions; evacuation procedures; a disaster contact list; and sections on salvage priorities, prevention, protection, response, recovery, rehabilitation, disaster team responsibilities, insurance, disaster supplies, suppliers, and equipment. Procedures for handling damaged materials, which have been tested and accepted by many conservators and institutions concerned with the safety and care of library materials, are also provided. Three appendices include: (1) a floor plan of the E. H. Butler Library; (2) instructions on drying wet books and records; air-drying wet books and records; and recovery techniques for non-print materials; and (3) a record of disaster recovery activities for library and archival collections. (MAS)

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Buffalo State College
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Buffalo, New York 14222
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E. H. BUTLER LIBRARY

DISASTER RESPONSE PLAN

3rd ed.
September 1994

IR055454

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY

Barbara Vaughan

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

May 1989
Revised July 1991, September 1994

The third edition of the E. H. Butler Library Disaster Response Plan is current as of June 1994. The purpose of the plan is to minimize the potential for disaster and to minimize damage to materials if a disaster should occur. It contains emergency instructions, evacuation procedures, a disaster contact list, and sections on salvage priorities, prevention, protection, response, recovery, rehabilitation, disaster team responsibilities, insurance, disaster supplies and suppliers and equipment. It also includes procedures for handling damaged materials which have been tried and accepted by many conservators and institutions concerned with the safety and care of library materials. The title of the plan has been changed from E. H. Butler Library Disaster Preparedness Plan. Major changes in the third edition were made in the Recovery Process section. New steps have been added and guidelines for packing non-print materials have been included. An appendix for recovery techniques of non-print materials has also been added.

Updated 1994 by

Barbara Vaughan, Coordinator of
Disaster Recovery Team

With the assistance of:
Mary Delmont
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Originally compiled by
Preservation Subcommittee
E. H. Butler Library
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Dedicated to the memory of

Joyce Herceg

whose invaluable contributions to this
Disaster Response Plan
and
total commitment to quality in
E. H. Butler Library
will not be forgotten

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EMERGENCY INSTRUCTIONS

A. FIRE

Be familiar with locations of fire alarms, especially in or near your own work area. (See p. 14)

1. During library hours, if a fire is detected and no alarm is sounding, IMMEDIATELY pull a fire alarm. This will automatically notify Public Safety and the Buffalo Fire Department. If you are closer to a phone than a fire alarm, call Public Safety at x6333. Then, pull the fire alarm on your way out of the building.

2. Begin immediate evacuation of building, alerting people to leave by all emergency exits. If you are on the second or third floor, quickly look around and alert anyone you see.

3. Even if the fire appears to be self-contained and extinguishable (e.g. a small one in a waste basket) pull a fire alarm or call Public Safety at x6333, whichever is quicker.

4. If a computer or electrical heater begins to burn, immediately pull a fire alarm or call Public Safety at x6333, whichever is quicker. Unplug it if possible.

If you discover a fire, the above steps should be followed. If you feel you can extinguish the fire you must be ready, willing and able to use a fire extinguisher. Also, the proper extinguisher must be used, water extinguisher for paper, wood or rags, or a carbon dioxide or ABC extinguisher for electrical or flammable liquids. Remember, fire extinguishers are the first line of defense. Always notify the proper authorities by pulling the fire alarm or notify the Public Safety Dept. by phone. Never assume someone else will.

B. WATER

Any signs of water leaking, dripping etc. should be called into the Director's Office at x6314. If office is closed, call Public Safety.

C. WATER OR FIRE DAMAGE TO COLLECTIONS

Immediately call in the Coordinator of the Disaster Recovery Team and with the Recovery Team, assess damage and activate plan for recovery of materials.

For water from above:

Cover stacks or computers with plastic sheet located in cabinets in Resource Management, BL 151, between Resource Management and Bibliographic Control.

OR

Move books off shelves using book trucks.

OR

Carry books to another location.

For water from below:

Move books higher on shelves.

OR

Move books off shelves to another location using book trucks.

Evacuation Procedures in case of FIRE

1. In case of fire or smoke, immediately **pull a fire alarm**. This will automatically notify Public Safety and the Buffalo Fire Department. If you are closer to a phone than a fire alarm, call Public Safety at x6333, and then pull the alarm on your way out of the building.

2. Begin to alert people to leave by **all normal and emergency exits**.

3. Staff on the first floor **do not** have to go to the 2nd or 3rd floors to evacuate people. The Buffalo Fire Department will check all floors and rooms when they arrive.

4. If you happen to be on the 2nd or 3rd floor when the fire alarm sounds, quickly look around and alert anyone you see. Tell them to alert anyone they see. Leave quickly by nearest stair exit. There are several **emergency exits** in the building.

5. Wake any **sleeping patrons** you might see; sometimes they can't hear the fire alarm.

6. For **patrons with disabilities** on the 2nd or 3rd floor, you can, under the direction of the Buffalo Fire Department:

   a. Direct or take the person to the **public elevator**, or if it's closer

   b. Take the person to the **freight elevator** in the NE quadrant. This elevator requires a submaster key and goes down to Resource Management.

   An elevator is the only way for a wheelchair-bound person to exit the building from the 2nd or 3rd floor.

   Everyone else always use the stairs. Alert the responding Public Safety or Fire personnel as to the location of any persons with disabilities.

Evacuation Procedures for a **NON-FIRE** Emergency

1. **Call Public Safety** at x6333. They will notify the Buffalo Fire Department not to come and will instruct you to pull a fire alarm. This is the quickest way to evacuate the building.

2. Begin to alert people to leave by **all normal and emergency exits**. The emergency exits do not trip an alarm to the Buffalo Fire Department.

3. Staff on the first floor **do not** have to go to the 2nd or 3rd floor to evacuate people. Public Safety will check the building.

4. If you happen to be on the 2nd or 3rd floor when the fire alarm sounds, quickly look around and alert anyone you see. Tell them to alert anyone they see. Leave quickly by nearest exit. There are several **emergency exits** in the building.

5. Wake any **sleeping patrons** you might see; sometimes they can't hear the alarm.

6. For **patrons with disabilities** on the 2nd or 3rd floor, you can:

   a. Direct or take the person to the **public elevator**, or, if it's closer -

   b. Take the person to the **freight elevator** in the NE quadrant. This elevator requires a submaster key and goes to Resource Management.

DISASTER CONTACT LIST

SUCB Public Safety 6333

Buffalo Fire, Police, Ambulance 911
(if Public Safety can't help)

Library Director's Office. 6314

(Interim) Library Director 6331, 688-1773
Maryruth Glogowski (Home)

Physical Plant

Director
Gary Kent 6653, 6111

Assistant to the Director
Joseph Ball 6111

Coordinator Environmental Health/Safety
David Miller 6653

Computing Services, Director's Office. 4206

In-house Disaster Recovery Team

	Office	Home
Coordinator of Disaster Recovery Team		
Barbara Vaughan	6317,	834-7539
Associate Archivist		
Mary Delmont	6308,	832-2977
Coordinator of Information and Access Services		
Carol Richards	6336,	634-0756
Coordinator of Collections and Technology		
Shirley Posner	6311,	693-9405
College Archivist		
Sr. Martin Joseph Jones	6304,	875-4705
Coordinator of Learning Systems		
Gail Ellmann	6307,	838-1022
Information and Access Services		
Randy Gadikian	6312,	627-4472
Coordinator of Microforms		
Amy DiBartolo	6309,	838-0788

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INTRODUCTION

Disasters are by definition unexpected events which result in damage, destruction, and loss of property. For libraries, a disaster (fire, flood, etc.) means not only physical loss but also loss of information, the recorded knowledge of mankind. Sometimes this loss is irreplaceable. The purpose of a disaster plan for libraries is to prevent disasters from occurring by assessing existing hazards and recommending appropriate corrections and to minimize permanent damage or loss to collections. The key to the successful implementation of a disaster plan is cooperation.

The steps to be taken to minimize loss of property and maximize the salvage of the most valuable parts of a library's collection after a disaster has occurred hopefully will never have to be implemented, but nevertheless represent the core of any disaster plan. The arrangement of this disaster plan is according to the natural sequence of events that would take place once a disaster is detected through the final recovery process and post-disaster assessment.

SALVAGE PRIORITIES, OVERALL

The sections on salvage priorities tell library personnel, the fire department or other authorities which parts of the collections are to be protected or salvaged first, second, etc. if that terrible decision ever has to be made.

First floor:

1. Electrical closets that house components for SHERLOCK functioning. All cable is plenum rated. The twisted-pair are shielded and the thin-wire is Belden. The electronic servers and repeaters are Digital Equipment Corporation products. Drops are RJ11, RJ45 and BNC.
   - BL 135 - free standing rack connected to the electrical closet via cabling
   - BL 150B - fiber optic connection to campus network
   - BL 154 - store room for Resource Management supplies. Electronic components are on a shelf in the electrical closet in the room.
   - BL 184B - houses library's emergency generator
   - BL 184C - houses transformer that controls power into BL 150B.
2. Irreplaceable items from Archives and Special Collections
3. OCLC terminals
4. Reference collection
5. Innovacq: processor, tape, two (2) terminals

Second floor:

1. Butler papers
2. Bound periodicals (coated paper) (NE)
3. Electrical closet (BL 280) (SE)
4. Locked room off BL 225 houses 2 DEC servers that are connected to BL 135 via thin-wire

Third floor:

1. Creative Studies materials
2. Circulating books classified L-P (coated paper) (SW and SE)

SALVAGE PRIORITIES BY DEPARTMENT

Information Services

1. BL 178: Interlibrary Loan records - top 2 drawers of file cabinet.
2. BL 178: Interlibrary Loan books borrowed from other libraries - books on the work table.
3. BL 157: Reference book collection - approximately 30,000 volumes.
4. BL 157: Computer/Compact Disc reference tools.

Special Services

1. BL 160: The Reading Edge (Kurzweil Reader)
2. BL 107A: Two Visualtec machines

Curriculum Lab (BL 110)

1. Caldecott & Newbery award books.
2. LC collection
3. Textbooks

Learning Systems (BL 218)

1. Computers
2. Large equipment on carts, VCR's, monitors, videodisc players, slide projectors, etc.
3. Phonodisc and CD collections.

Microforms (BL 275)

1. The Courier Express, Morning Express, & Daily Courier microform collections.
2. 5 Minolta microform reader/printers.
3. Microform equipment (readers).
4. The rest of the collection, in particular:

--ERIC documents.
--Newspapers on microfilm (Buffalo News, NY Times, Washington Post, etc.)
--Journals on microfilm.
--NCJRS & Kraus Curriculum Guide collections.
--Early American Imprints microcards

--Microfilm in second floor SE

Access Services (BL 147)

1. Current receipts.
2. IBM-PC back-up.
3. Fine money.

Reserve (BL 147)

1. 3-ring binders listing all current items on reserve and professor's personal copies.

Bibliographic Control (BL 150)

1. Terminals & printers.
2. New materials.
3. Electrical closet (150B) - houses fiber optic connection to campus network.

Resource Management (BL 155)

1. BL 155B - INNOVACQ tapes, CPU.

Archives & Special Collections

Basement - Room 003

1. Photographs of Rabbi Klein and Dr. Selig Adler
2. Lois Lenski collection
3. St. Elsewhere videotapes

First floor -Main Lobby

1. Two large oil paintings on wall above ramp.
2. Photograph of E. H. Butler Sr. above the ramp

First floor - Room 140

1. 22 oversize posters in wooden crate placed against right wall near fire extinguishers.
2. Oversize Special Collections books.
3. Rogovin photograph collection.
4. Butler Library floor plans and electrical network blueprints.

5. Inventory books and card catalog.

6. Bound Buffalo State College Catalogs.

Second floor - Room 217 - Fronczak Room

1. Medal, artifacts, photographs in glass case and on walls of room.

Second Floor - BL 209, Butler Foundation Room

1. Photographs of Edward H. Butler Sr., Edward H. Butler Jr. and Kate Butler Wallace.

2. Butler manuscript collection in Archives room.

Caudell Hall houses Archives Collections of the College in basement.

The Dean's Office of Applied Science and Education in Caudell Hall would notify Butler Library of any disaster there.

PREPAREDNESS: PREVENTION

Potential Hazards, Overall

Internal Hazards

1. Skylights on the second floor of stacks are a potential source of water damage.

2. Electrical systems include some old wiring. There have been instances of water dripping onto electrical boxes, which constitutes a potential fire hazard. Further, the use of numerous portable heaters during cold periods and fans during hot weather may strain the system and prove to be another potential fire hazard. Coffee pots left on could also be a hazard.

3. Plumbing: Waterpipes along the ceiling of the first floor have leaked. Lavatories have malfunctioned.

4. Possible excess load on microforms balcony may have caused cracks in walls beneath it and may contribute to future damage.

5. Grit from ceiling and vents falling into computers and other electrical equipment may be a fire hazard.

6. The interior book drops in Access Services are potential sites for vandalism, including arson.

7. Debris in BL 184B where library's emergency generator is housed and in BL 280, the electrical closet in SE quadrant.

External hazards:

1. The flat roof and the roof joints are potential sources of leaks, both from rain and snow and from the air-conditioning system which is located on the roof. The roof is inspected periodically.

2. A potential water hazard is the fountain located just outside the library.

3. The exterior book drops are potential sites for vandalism, including arson.

4. Vandalism (breaking and entering) has occurred.

5. Any renovations and/or construction which may be taking place in the building will be a potential hazard.

6. Natural disasters which can occur in the area include blizzards, tornadoes, earthquakes and floods.

Potential Hazards by Department

Dept/Sect	Location	Potential Hazards
Information Services	BL 157, 146 147A, 147C, 183	Leaking pipes over catalog, in 147A, 147C; extensive use of extension cords and power strips
Learning Systems	BL 218	Flakes from ceiling falling on computers: potential fire hazard
Microforms	BL 275	Cracks in balcony wall: potential weight hazard; micro cabinet drawers at floor level; extensive use of extension cords and power strips; combustible toner
Reserve	BL 147	Leaking plumbing above work area
Bibliographic Control	BL 150	Exposed cables; space heaters; poor safety practices; leaking water - ceiling
Resource Management	BL 155	Exposed cables; leaking water - ceiling
Archives/Spec. Coll.	BL Basement	Flooding in basement; poor lighting

Preventive Measures

1. Stack areas: Shelving is braced. Exits are clear. Collections are shelved on metal stacks which have a 4-inch-high base to keep materials clear of the floor.

2. Roof, drain pipes and gutters are on a maintenance schedule to keep them in good order.

3. Recommended for implementation:

   a. Seal ceilings and clean vents to prevent grit from falling into computers.
   b. Renovate the HVAC to eliminate the need for space heaters and fans.
   c. Strictly enforce the smoking and eating/drinking policies.
   d. Request Department Heads to enforce good safety practices, e.g., avoiding pile-up of trash.
   e. Provide more security in the building to prevent vandalism.

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PREPAREDNESS: PROTECTION

E. H. Butler Library has fire detection and fire suppression capabilities as described below.

Fire detection equipment includes smoke alarms in every room, including the basement, located in the heating/ air conditioning ducts. These are monitored electronically. There are heat detectors in the mechanical rooms and in some of the janitors' closets. Pull stations are located in every quadrant as listed below and in the basement near the entrances. A fire panel tells where the fire is located. Alarms ring at the campus Public Safety Office and at the Buffalo Fire Department's main office which dispatches equipment to the campus.

Fire Alarm Pulls

First floor:

NW - Stairway outside Director's Office
NE - Information Services (BL 157) room; outside Bibliographic Control (BL 142); outside emergency exit near BL 155E
SE - Corridor near elevator
SW - At check-out desk

Second floor:

NW - Stairwell
NE - Stairwell
SE - Stairwell
SW - Corridor between Learning Systems and BL 210

Third floor:

NW - Stairwell
NE - Stairwell
SE - Stairwell
SW - Inside Courier Express area

Fire suppression systems consist of fire extinguishers on every floor and throughout the basement which are checked regularly. There is no sprinkler system or hose cab.

Protective equipment by department is as follows.

Dept/Sect	Location	Protection
Information Services	BL 157	4 fire extinguishers, 1 fire alarm pull; emergency exits
Curriculum Lab	BL 110	2 fire extinguishers; 2 emergency exits; fire alarm pull
Learning Systems	BL 218	3 fire extinguishers; Sonitrol
Microforms	BL 275	2 fire extinguishers
Access Services Storage	BL 103	2 fire extinguishers
Access Services/Reserve	BL 147	4 fire extinguishers
Bibliographic Control	BL 150	3 fire extinguishers; Sonitrol
Resource Management	BL 155	3 fire extinguishers; Sonitrol
Archives/Special Collections	BL 137, 135	2 fire extinguishers

RESPONSE/RECOVERY TIMETABLE

Day 1	. Obtain safety clearance and authorization to enter area. . Perform all response procedures except report.
Day 2	. Deliver salvageable wet materials to freezer before end of day 2. . OR, Have all air-drying procedures underway by end of day.
By end of recovery period	. Remove wet materials which are not to be salvaged. . Remove dry materials . Do a follow-up/assessment report. . Work out plans to restore library services. . Restore the area (clean, etc.).
Final step	. Return salvaged materials to proper locations.
Yearly	. Practice disaster procedures. . Examine restored collections to ensure that mold has not developed.

RESPONSE PROCEDURES

I. MINOR DISASTERS

A. FIRE

1. During library hours, if a fire is detected and no alarm is sounding, IMMEDIATELY pull a fire alarm. This will automatically notify Public Safety. If you are closer to a phone than a fire alarm, call Public Safety at x6333. Then, pull the fire alarm on your way out of the building.

2. Begin immediate evacuation of the library, alerting people to leave by all emergency exits. If you are on the second or third floor, quickly look around and alert anyone you see.

3. Even if the fire appears to be self-contained and extinguishable (e.g. a small one in a wastebasket) pull a fire alarm or call Public Safety at x6333, whichever is quicker.

4. If a computer or electric heater begins to burn, immediately pull a fire alarm or call Public Safety at x6333, whichever is quicker. Unplug it if possible.

If you discover a fire, the above steps should be followed. If you feel you can extinguish the fire you must be ready, willing and able to use a fire extinguisher. Also, the proper extinguisher must be used, water extinguisher for paper, wood or rags, or a carbon dioxide or ABC extinguisher for electrical or flammable liquids. Remember, fire extinguishers are the first line of defense. Always notify the proper authorities by pulling the fire alarm or notify the Public Safety Dept. by phone. Never assume someone else will.

B. WATER

Any signs of water leaking, dripping etc. should be called into the Director's Office at x6314. If the office is closed, call Public Safety, x6333.

C. WATER OR FIRE DAMAGE TO COLLECTIONS

Immediately call in the Coordinator of the Disaster Recovery Team and with the Recovery Team, assess damage and activate plan for recovery of materials.

II. MAJOR DISASTERS

A. When a major disaster strikes, few if any library personnel may be in the building. Any member of the library administrative staff, member of the recovery team or staff member who can reach the library should notify:

1. Public Safety, if not already on the scene.

2. Director of Physical Plant or Physical Plant Liaison to the Library.

3. Library Director.

4. Coordinator of Disaster Recovery Team and recovery team members.

SEE DISASTER CONTACT LIST (p. 5) FOR PHONE NUMBERS

B. A list of library personnel to notify should be given to Public Safety and Physical Plant to use when a disaster or even a minor disaster hits the library during off library hours.

C. If a disaster happens during the day, the Director of the Library and the Coordinator of the Disaster Recovery Team (or others in the chain) will begin the library response.

D. The site must receive an official safety clearance, and authorization to enter the area must be received from fire or building officials.

E. Command Post and Operations

1. The Coordinator of the Disaster Recovery Team, in cooperation with the Director of the Library will make all decisions on the best use of time, personnel and energy and set priorities.

2. The Coordinator and the team will establish the command post in safe proximity to the disaster. The command post will be provided with telephone or radio communications. The Coordinator will delegate person(s) responsible for supplies, food procurement, etc.

3. The Coordinator or a designated team member will contact the New York State Library, Conservation/Preservation Program, (518) 474-6971 and/or the Northeast Document Conservation Center, (617) 470-1010 for assistance, if need is determined.

4. Assess damage

- How much?
- What kind? Fire, soot, smoke, clean water, dirty water, heat, humidity?
- Is it confined to one area or has the entire building been affected?
- What types of materials have been damaged?

- Are the damaged items easily replaced or irreplaceable?
- Can they be salvaged by the in-house recovery team, or will outside help be required?
- Walk through the entire area and TAKE EXTENSIVE NOTES. Photographs should be taken to document the damages. Persons responsible should contact at this time the sources of supplies and services. Appropriate equipment and supplies should be gathered. Keep all receipts.
- Has SHERLOCK been affected? If so, contact Computing Services. Access to SHERLOCK can be provided from alternate locations such as Computing Services, office computers or home computers. E-mail messages can be posted to inform staff and patrons of service and progress.

5. One team member will be responsible for writing the follow-up assessment report. (See Recovery Process Section, p.31).

6. The Disaster Recovery Team estimates the cost of damages and presents it to the Director of the Library.

7. The Director of the Library notifies the Vice President's Office and provides them with documentation of the nature and extent of the damages, including an estimate of the cost of recovery. (See Insurance section, p.26).

8. The team is responsible for practice drills and for meeting to update the disaster plan. One member will be responsible for making sure Disaster Contact list is kept current.

F. Copies of the floor plans of the library and electrical networking blueprints are located in Archives and Physical Plant. The Coordinator of the Disaster Recovery Team also has a copy.

G. Begin the recovery phase. (See Recovery Process Section, pp.27-31 and Appendix B).

DISASTER SUPPLIES AND EQUIPMENT

Item	Location
Aprons/cover-ups	BC, Archives, PP
Book trucks, Metal	All library depts. (BC, IS, AS, RM)
Bricks	Emergency supplies
Brooms	Archives, Janitor's closets (BL 182, 184A, 206, 381), PP, RM
Buckets	Archives, IS, Janitor's closets, PP
Camera and film	Instructional Resources
Cardboard boxes	Archives, Off-campus
Dehumidifiers	Off-campus, 2 in Courier Express area (3rd floor southwest quadrant)
Denatured alcohol	Emergency supplies
Disinfectant	Archives, Janitor's closet (BL 182, 184A), PP
Dust filter masks	LS, PP
Emergency lights	PP
Extension cords, Heavy duty	IS, BL 210, RM, LS, PP
Fans	Many library depts., PP
Fencing, Safety	Off-campus, PP
Fire extinguishers	All library depts., see map p.34
First aid kit	Public Safety, Weigel Health Center
Fishline	Emergency supplies
Flashlights	All library depts.
Folding tables	Campus Inventory Control (GC 410)
Garbage bags, large	PP, Storage BL 153
Garbage cans, large plastic	24 in library
Generator, portable	PP
Grocery carts	Off-campus
Hand tools	PP
Handtrucks, dollies	PP
Hygrometer	PP, Off-campus
Hard hats	PP
Labels	BC, Emergency supplies, RM
Magic markers, waterproof	Emergency supplies, BC
Moisture meter	Archives
Mops	Janitor's closet (BL 182, 184A), PP
Newsprint	Emergency supplies
Pads of paper, pens	All library depts., Emergency supplies
Pallets, pallet jacks, fork lifts	PP
Paper towels	Storage BL 153, PP, Emergency supplies
Plastic boxes (milk-carton type)	Off-campus
Plastic sheeting	Emergency supplies

KEY:

Archives - BL 137
AS - Access Services, (BL 147)
BC - Bibliographic Control (BL 150)
Dir. Off. - Director's Office (BL 134)
Emergency supplies - RM 151
IS - Information Services (BL 147A)
LS - Learning Systems (BL 218)
Off-campus - See pp.23-25
Res. - Reserve (BL 147)
RM - Resource Management (BL 155)
PP - Physical Plant

Pumps, portable	Off-campus, PP
Razor cutters	RM, Campus Receiving, Emergency supplies
Rope, clothesline	PP
Rubber boots	PP
Rubber gloves	IS
Scissors	All library depts.
Scotch tape	All library depts., Emergency supplies
Soap, liquid	Janitor's closet (BL 206)
Sponges	Janitor's closet (BL 182, 184A), BC, IS, Archives, PP
Strapping tape	Emergency supplies
Surgical gloves	Off-campus, PP
Tarps, drop cloths	PP
Toilets, portable	Off-campus
Twine	Emergency supplies
Two-way radios, CBs	Off-campus, PP
Vacuum cleaners, dry	Res., AS, RM, LS, PP, Dir. Off.
Vacuum cleaners, wet	Off-campus
Waste baskets, plastic	35 in library
Waxed paper and/or freezer paper	Emergency supplies
Wire, flexible	Emergency supplies

Disaster Supplies and Equipment
at PHYSICAL PLANT

Aprons/cover-ups	Garbage bags	Pumps, portable
Brooms	Generator, portable	Rope, clothesline
Buckets	Hand tools	Rubber boots
Disinfectant	Handtrucks, dollies	Sponges
Dust filter masks	Hard hats	Surgical gloves
Emergency lights	Moisture meters	Tarps, drop cloths
Extension cords	Mops	Two-way radios, CB's
Fans	Pallets, pallet jacks, fork lifts	Vacuum cleaners, dry
Fencing, Safety		

If additional supplies and equipment are needed, see next section, Off-Campus Suppliers and Equipment.

KEY:

Archives - BL 137
AS - Access Services (BL 147)
BC - Bibliographic Control (BL 150)
Dir. Off. - Director's Office (BL 134)
Emergency supplies - RM 151
IS - Information Services (BL 147A)
LS - Learning Systems (BL 218)
Off-campus - See pp.23-25
Res. - Reserve (BL 147)
RM - Resource Management (BL 155)
PP - Physical Plant

Denatured alcohol - Good for removing mold from the covers of books. Inhibits mold growth.

Disinfectant - For cleaning shelves after wet books have been removed. Prevents mold growth.

Fishline - For hanging partially wet books which have become distorted due to interleaving and swelling from water. Returns spine to original shape.

Garbage cans, large plastic - For carting away wet debris from air-drying operations. Can be filled with cold water to keep water-damaged microforms, movie films, etc. wet until they can be processed. Also for washing dirty materials.

Generator, portable - Provides electricity for fans, lights, dehumidifiers, etc. if electricity is not available.

Grocery carts - For transporting books, materials

Hygrometer - For measuring relative humidity and temperature. Good for spot checks in the stacks and other areas.

Labels - For labeling crates, boxes.

Milk crates - For packing, transporting, freezing and freeze-drying wet books.

Moisture meter (Hygrometer) - For measuring moisture content inside a book or papers in a file.

Newsprint - Inexpensive and absorbent material for covering tables and for interleaving wet books.

Pads of paper, pens - For documentation.

Pallets, fork lifts, etc. - Useful in large scale recovery efforts when moving wet books.

Paper towels - For interleaving in wet books to absorb water during air-drying. Also for small clean-ups.

Plastic sheeting - For covering bookshelves, computers, catalogs, etc. to prevent water damage. Also, for covering tables when drying books, etc.

Razor cutters - For cutting plastic sheeting.

Safety fencing - Bright-colored plastic ribbon for roping off disaster site.

Strapping tape - For sealing boxes, holding plastic sheeting in place.

Waxed paper/freezer paper - For wrapping around books which are being packed for freezing, to prevent covers from sticking together. Good for interleaving between pages of coated paper in the air-drying process.

OFF-CAMPUS SUPPLIERS AND EQUIPMENT

GROCERY CARTS

Tops Friendly Markets, 60 Dingens, Buffalo, NY 14206. 827-3234.

Jubilee Foods, 45 Azalea Dr., Cheektowaga, NY 14227. 668-7232.

Quality Markets, 499 Hopkins & Klein Rd., Williamsville, NY 14221. 689-8393.

FREEZER FACILITIES

Arctic Freezers, 197 Scott, Buffalo, NY 14204. 856-2064.

Will store boxed books in an emergency if space available.
Rates depend on case weight.

FREEZER TRUCKS

Kaminski Refrigeration and Truck Equipment, Inc., 245 Lewis St., Buffalo, NY 14206. 852-1954, emergency 668-4029.

Refrigerated storage trailers

Buffalo Thermo King, 248 Two Mile Creek Rd., Tonawanda, NY 14150. 871-9013.

Trailers 45' x 8' x 9'. Can be maintained at -10 F., -20 F.
Long term storage available.

HYGROMETERS

Hygrometers measure the relative humidity in the air.

Cole-Parmer Instrument Co., 7425 North Oak Park Ave., Chicago, IL 60648-9930. 1-800-323-4340. Orders filled within a few days. Supply catalog on Barb's desk.

Jordan Supply Co., Inc., 400 Smith, Buffalo, NY 14210. 826-3400.

MATERIALS HANDLING EQUIPMENT

Pallets

Neville Lumber Co., 73 LaSalle, Buffalo, NY 14214. 834-3038.

Pallet Exchange, 534 Hopkins St., Buffalo, NY 14220. 823-2400.

Inner City Pallet Exchange, 64 Mackinaw, Buffalo, NY 14204. 856-3353.

Pallet trucks, fork lifts, etc.

Buffalo Materials Handling Corp., 50 Sonwil Drive, Cheektowaga, NY, 14225. 681-7800.

Dobmeier Lift Trucks, Inc., 620 Ontario St., Buffalo, NY 14207. 876-8280.

K-W Rental, 420 Hopkins St., Buffalo, NY 14220. 849-8110, emergency 636-0751.

MILK CRATES

Upstate Milk Co-Operatives, Inc., 1730 Dale Rd., Cheektowaga, NY 14225. 892-2121.

Probably able to loan in case of disaster.

Wendt's Dairy, 8450 Buffalo Ave, Niagara Falls, NY 14304. Tonawanda telephone no. 692-6543.

Willing to loan, depending upon their supply.

PORTABLE PUMPS

Kenmore Renting Co, 1297 Kenmore Ave., Kenmore, NY 14217. 873-2796.

Rupp Rental & Sales Corp, 101 Great Arrow Ave., Buffalo, NY 14216. 877-1992.

Simon Electric Co. Inc. 367 Ellicott, Buffalo, NY 14203. Emergency service 24 hr/day, 852-3824.

SAFETY FENCING

Safety fencing is the bright-colored plastic ribbon used around construction or disaster sites. Available from contractors' supplies firms, such as

North State Supply, 1122 Military Road, Buffalo, NY 14217. 875-8093.

SURGICAL GLOVES

Benson's Surgical Supply Co., Inc., 1005 Kenmore Ave., Kenmore, NY 14217. 875-1113.

Sheridan Surgical, Inc. 4525 Bailey Ave., Amherst, NY 14226. 836-8780.

TOILETS, PORTABLE

Ball Toilet & Septic Service, S 3725 Jeffrey Blvd., Blasdell, NY 14219. 823-3606.

Johnny-On-The-Spot, 2525 River Rd., North Tonawanda, NY 14150. 694-1200.

TWO-WAY RADIOS

FM Communications, Inc., 1914 Colvin Blvd, Tonawanda, NY 14150. 832-2026.

Hirsch's 2-Way Radios, 219 California Dr., Williamsville, NY 14221. 632-1189.

VACUUM CLEANERS

Chi Chi's Hardware and Tool Rental, 375 Grant, Buffalo, NY 14213. 885-9210.

Taylor Rental, 4849 Broadway, Depew, NY 14043. 681-0860.

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INSURANCE

New York State institutions are self-insured. In the event of a disaster, the State would have to make a special appropriation for clean-up of the area and recovery and replacement of library materials.

The Courier-Express collection is insured by the Buffalo and Erie County Historical Society. In the event of a disaster to this collection, call the following numbers, in order of preference:

1. Director of the Historical Society,
   William Siener, Work 873-9644, Home 876-7340

2. Director of Library & Archives,
   Mary Bell, Work 873-9644, Home (905) 685-8015

3. Insurance agent, Warren-Hoffman Associates, 856-2223

Art works brought into the library for exhibits are insured by the college only in the event of a total disaster. Call Gary Phillips at x4312 if these materials are affected.

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RECOVERY PROCESS

The recovery process should not begin until the emergency situation has been brought under control. Ideally, salvage operations should not commence until the Coordinator of the Disaster Recovery Team has arrived. Damage to books and paper would most likely be through the direct action of water in the case of a burst water pipe or indirectly in the course of extinguishing a fire. In either case, the result is the same - wet paper that tears easily, swells rapidly, and distorts. Water damage to collections can be minimized if water-proof tarps or plastic sheeting are kept on hand (see Disaster Supplies, p. 20-22) to drape over materials in the path of water leakage or firemen's hoses. An additional concern with wet paper is the danger of mold development which, given the right conditions of heat (70° F.) and relative humidity (70%) will begin within 48 hours. Since the recovery of water damaged library materials is basically the same whether they are the result of a major fire disaster or a minor water leakage problem, the steps to be taken during the salvage process will be discussed as a whole rather than in individual scenarios. The following steps are recommended for an effective operation.[1]

1. Stabilize the environment - The environment must be stabilized and controlled both before and during the recovery process to prevent the growth of mold. Ideal conditions are 65° F. and 50% RH. Have thermometers, hygrometers, hygrothermographs and/or sling psychrometers on hand to constantly monitor the temperature and humidity. Standing water should be mopped up or pumped out. Doors and windows should be opened, and the ventilation system turned on (without heat) as soon as possible. Fans should be kept running constantly to circulate the air. Portable generators should be readily accessible in case of power failure. Dehumidifiers can help to lower the humidity.

2. Organize procedures - Identify and secure the following before packing starts:
   - place (air drying location, freezer, storage) to which materials will be moved.
   - means of transport (book trucks, grocery carts)
   - packing area, with room to sort and pack
   - loading area with accessibility for vehicles bringing supplies and removing packed boxes.
   - route by which materials will be removed from building.
   - elevators may not be functioning. Consider pulleys, conveyor belts, cranes.
   - rest area for workers; organize refreshments and, if necessary, portable toilets.

3. Activate in-house disaster recovery team - Organize work crews and be sure their responsibilities are clearly defined. No salvage activity should begin until a plan of action has been determined by the team leader. All crew members should be suitably attired. Smocks or old shirts should be worn over clothing, and boots should be worn if floors are wet or muddy. Hard hats are a necessity if there is any danger of structural weakness on the site. Rubber gloves are essential for use with caustic cleaners, and dust masks should be used to guard against fumes and dust. Disaster and recovery areas should be inaccessible to the public.

   Frequent rest breaks should be provided for workers.

4. Assemble equipment - Plastic crates or cardboard boxes; wax paper or freezer wrap; waterproof marking pens, clipboards, paper, labels; lighting, fans, dehumidifiers, generators if necessary; book trucks, hand trucks to move boxes. Tables should be moved to designated area to provide work surfaces. All tables should be covered with plastic sheeting.

5. Sort materials - Bring, prepare and assemble packing materials (boxes, cut waxed paper). Sort library materials for air drying, freezing, special processing, for direct return to shelves when conditions permit, and for discard.

6. Keep records of everything - which materials you are drying immediately, freezing, discarding, etc. Record how much staff is being used and how much time particular operations take, for financial purposes and for future planning. Make a card file or record operations on sheets of paper. Tape recorders could be used also.

7. Pack wet collection materials - Fire-damaged materials that are only charred or damaged by soot and smoke but not water-damaged are relatively stable and do not require immediate attention. Water-damaged print materials are not stable and although minimally affected items can be successfully air dried if the proper environmental conditions exist, freezing of water soaked materials remains the procedure of choice in stabilizing wet documents of all types.

Guidelines for Packing Wet Library Materials

[from Betty Walsh, Western Association for Art Conservation Newsletter (May 1988)]

Be extremely careful when handling wet materials. All of them are very fragile, including their paper boxes. If the boxes have disintegrated replace them with new containers. Don't unpack structurally sound containers (although they may be reinforced by packing inside plastic crates). Fill cartons and crates three-quarters full. Keep identification labels with objects. (Don't mark wet paper, but picture frames and reels can be marked with a grease pencil). To prevent further damage, do not stack materials in piles or on the floor.

Paper

Single sheets of paper - Do not try to separate but interleave the folders every two inches with freezer paper and pack.

Watercolors, maps, and manuscripts with soluble media - Do not blot the surface. Quickly freeze or dry.

Coated papers - Keep wet by packing in boxes lined with garbage bags, then freeze.

Framed prints and drawings - If time and space permit, unframe and pack as for single sheets.

Maps, plans, oversize prints, and manuscripts - Sponge standing water out of map drawers. Remove the drawers from the cabinet, ship and freeze them stacked up with 1" x 2" strips of wood between each drawer. Pack loose, flat maps in bread trays, flat boxes, or plywood sheets covered in polyethylene. Bundle rolled maps very loosely to go in small numbers to the freezer, unless facilities are available for conservators to unroll them.

Books

Don't open or close wet books or remove wet book covers. If the water is dirty, wash the books before freezing. Do not wash open books and those with water soluble media. Wash closed books in tubs of cold running water and dab away (do not rub) mud with a sponge, but only under the direction of a conservator.

Wrap waxed or freezer paper around every other book to avoid freezing together. Bare books should not touch sides of crates. Place books into crate or box spine down in single layers.

Paintings

Drain off excess water and take to a work area for immediate drying. Transport horizontally if you can. If not, carry the painting facing toward you, holding the side of the frame with the palms of your hands. Larger paintings should be carried by two people. The order of removal and treatment is: first, the most highly valued; second, the least damaged; third, slightly damaged, and fourth, severely damaged.

Computer Disks (Magnetic)

If the disks are wet, pack them upright in containers of cold distilled water. Make arrangements to air dry.

Sound and Video Recordings

Phonodiscs, Laserdiscs and Compact Discs - If storage boxes are badly damaged, transfer the discs, up to five at a time, to milk crates. Pad the bottoms of the crates with ethafoam and interleave with ethafoam every 25 records to absorb shocks. Always support the discs vertically and hold the discs by their edges. Avoid shocks and jolts during transport.

Sound and Video Tapes - Pack vertically into egg crates or cardboard cartons. Do not put excessive weight on the sides of the reels or cassettes.

Photographic Materials

Salvage without delay these historic photographs:

Wet collodion photographs (ambrotypes, tintypes, pannotypes and wet collodion glass negatives) - Salvage first and air dry immediately. Both immersion and freezing will destroy the emulsion.

Daguerreotypes - Salvage and air dry.

Nitrates with softening emulsions - Freeze immediately and make arrangements to freeze dry. Emulsions are water soluble and could be lost.

Other photographs should be kept wet in containers of fresh cold water until they are either air dried or frozen. If allowed to partially dry, they will stick together. Pack inside plastic garbage pails or garbage bags inside boxes. Keep to a minimum the immersion time until treatment or freezing.

Prints, negatives and transparencies - Salvage color photographs first, then prints, then black and white negatives and transparencies. If facilities and personnel are available, air dry. Pack and freeze if not.

Motion pictures

Open the film can, fill it with water, and replace lid. Pack into plastic pails or cardboard cartons lined with garbage bags. Ship to a film processor for rewashing and drying.

Microforms

Microforms in rolls - Do not remove the films from their boxes. Hold cardboard boxes (and their labels) together with rubber bands. Fill boxes with water, then wrap 5 boxes of film into a block with plastic wrap. Pack the blocks into a heavy duty cardboard box lined with 3 garbage bags. Label as wet film and ship to a microfilm processor.

Microfilm strips in jackets - Pack and freeze.

Diazo microfiche - Pack, freeze, and make arrangements to air dry.

Parchment and Vellum

Separate from other documents, pack in crates or flat boxes, and freeze.

See Appendix B-4 for recovery techniques for non-print materials.

8. Remove and freeze wet materials - Mark milk crates or boxes with call numbers of contents, or keep a list of affected call number sequences. Keep a tally of the number of crates and boxes sent to each destination if possible, with contents notation. The crates containing wet materials should be placed on palates to allow dripping and for easy removal and transport. Transport soaked books into freezer within 48 hours. Rental trucks are listed along with services for blast freezing, cold storage and freeze drying in Off-Campus Suppliers and Equipment section. Campus freezer facilities are available during the summer and intersessions. Crates can be freed when books are frozen. If freeze-drying is not planned, frozen books can later be air-dried. (See Appendix B-1).

Priority for Freezing

1) Materials which have already developed mold.
2) Leather and vellum-bound volumes.
3) Materials on coated stock.
4) Manuscripts and art on paper stock.
5) Photographic prints.
6) Journal and monograph volumes.

Collection priorities will impact on all items of the above list.

9. Remove dry collection materials - Dry materials should be removed from the scene of the disaster to facilitate clean-up of the area. They should be stored in a dry, well ventilated area and must be checked regularly for mold development before being returned to the collection.

10. Do a follow-up/assessment report - A member of the recovery team will prepare a written report, including photographs noting the effectiveness of the response plan, changes that should be made, evaluations of all suppliers of equipment and off-site facilities used, locations in the building where the disaster struck including photographs, dates, and extent and nature of the disaster.

    The report will be given to the Director of the Library with a second copy kept in Archives.

11. Restore library services - The Library Director with the library staff will work out plans to restore library services if possible as work begins.

12. Restore the area - After the damaged items have been removed and the environment has been stabilized, the area must be thoroughly cleaned. Walls, floors, ceilings and all furniture and equipment must be scrubbed with soap and water and a fungicide. Carpeting, and especially the padding under it, should be carefully examined, as mold will develop rapidly. Removal of smoke odor and fogging with fungicides or insecticides should be performed only by professionals. The physical soundness of the building and shelving units have to be ascertained. Fire detection systems and extinguishers have to be reinstated. Climate control must be set back to normal. Security systems have to be returned to normal.

13. Record recovery activities for New York State Library - A member of the recovery team will fill out the form which solicits information on disasters involving library and archival materials. (See Appendix C)

REHABILITATION

Only after the disaster area is repaired, cleaned, and disinfected can collections be returned to their proper locations. All materials must be absolutely dry and free of mold before any items are reshelved. Often materials still need to be sorted, cleaned, repaired and/or boxed. Also, they may require tattle tape and spine labels. If the disaster has been a large one, this sorting and rehabilitation process may take a long time. Any plans which can be made ahead of time for staff, space or training will help save time and money. All collections should be examined on a regular basis to ensure that mold development does not occur. If computer files and/or equipment were affected, replacements and upgrades need to be determined. Software and active data files might have to be reloaded. Damaged furniture and fixtures need to be cleaned or replaced. They should be free of dust, soot and mold before computer equipment is placed on them.

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ONGOING RESPONSIBILITIES OF THE DISASTER RECOVERY TEAM

1. Undergo initial training for disaster response and a periodic updating of skills.

2. Meet periodically to review and update the disaster preparedness plan.

3. Arrange for periodic training of the library staff in disaster preparedness.

4. Check disaster supplies periodically.

5. Search for new, potential safety hazards in the library.

6. Submit a report to the library director on results of disaster team meetings, new safety hazards, and updates to the disaster preparedness plan.

7. Apprise all appropriate college staff outside of the library of the disaster preparedness plan and its implementations.

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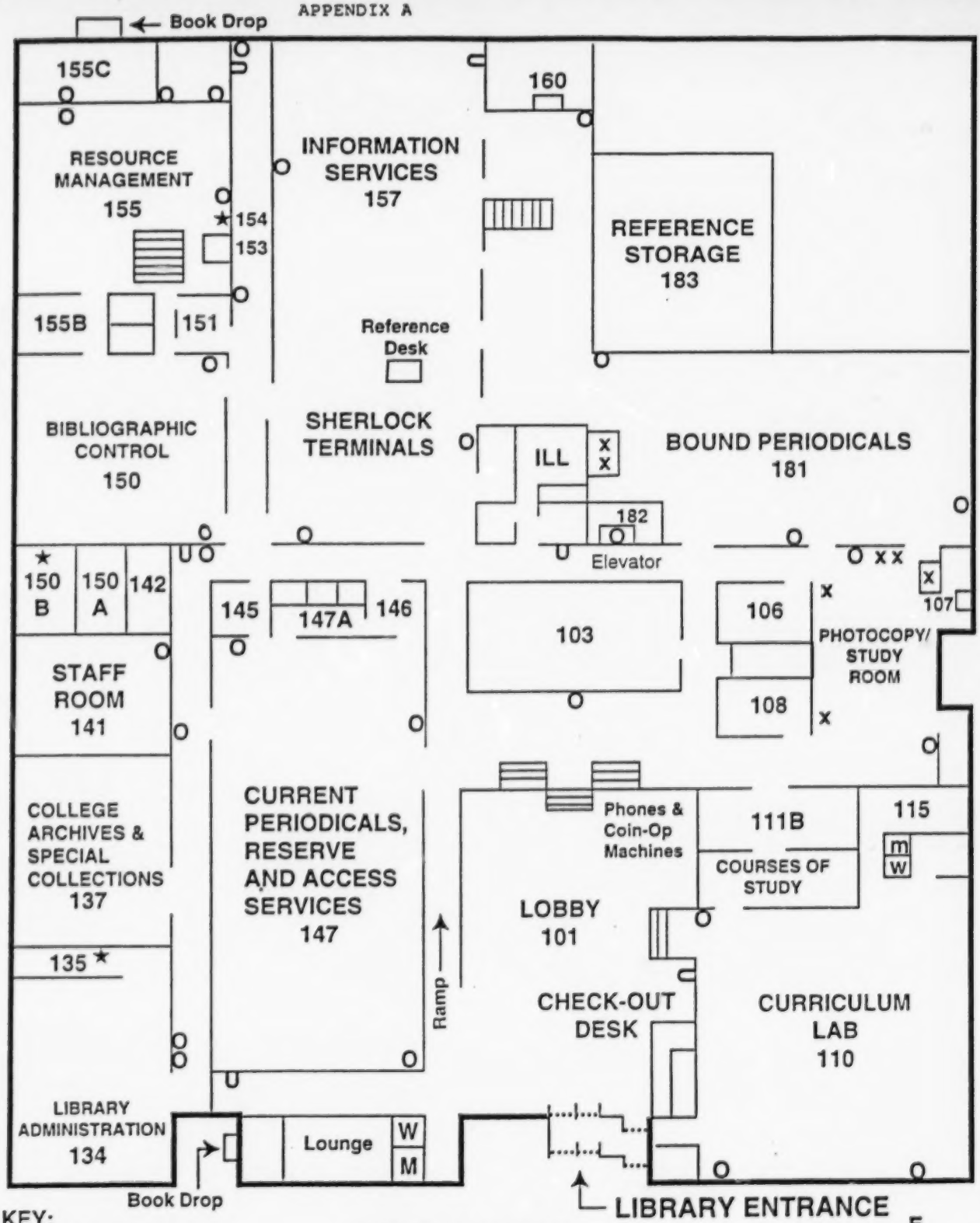
APPENDIX A



KEY:

O Fire Extinguishers

⊂ Fire Alarm Pulls

ILL Interlibrary Loan

X Photocopy Machines

★ Electrical Closets

FIRST FLOOR

E
N S
W

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APPENDIX B -1

DRYING WET BOOKS AND RECORDS[1]

There are currently five ways to dry wet books and records. All have undergone at least some minimal level of testing under emergency conditions; several have been used extensively. These are described to assist you in making the best choice given your circumstances: cause of damage, level of damage, numbers involved, rarity/scarcity, personnel available, budget available, drying service available. Advice from a conservator or preservation administrator experienced in disaster recovery can be helpful before the final selection(s) is made. It is important to remember that no drying method restores materials. They will never be in better condition than the one they are in when drying begins. If time must be taken to make critical decisions, books and records should be frozen to reduce physical distortion and biological contamination.

Air Drying

Air drying is the oldest and most common method of dealing with wet books and records. It can be employed for one item or many, but is most suitable for small numbers of damp or slightly wet books and documents. Because it requires no special equipment, it is often seen as an inexpensive method of drying. But it is extremely labor-intensive, can occupy a great deal of space, and result in badly distorted bindings and textblocks. It is seldom successful for drying bound, coated paper. The correct technique for air drying is described in the handouts. (Book and paper conservators should always be consulted for the drying of rare or unique materials. They may choose to air dry items or may suggest one of the other alternatives.)

Dehumidification

This is the newest method to gain credibility in the library and archival world, although it has been used for many years to dry out buildings and the holds of ships. Large, commercial dehumidifiers are brought into the facility with all collections, equipment and furnishings left in place. Temperature and humidity can be carefully controlled to user specifications. Additional testing is being undertaken, but the technique is certainly successful for damp or moderately wet books, even those with coated paper, as long as the process is initiated before swelling and adhesion has taken place. The number of items is limited only by the amount of equipment available and the expertise of the equipment operators. This method has the advantage of leaving the materials in place on the shelves and in storage boxes, eliminating the costly step of removal to a freezer or vacuum chamber.

1 Taken from the New York State Library Disaster Plan Guidelines for Library and Archival Collections produced by Sally Buchanan, Conservation Consultant, as part of a disaster preparedness pilot project sponsored by the New York State Library.

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Freezer Drying

Books and records which are only damp or moderately wet may be dried successfully in a self-defrosting, blast freezer if left there long enough. Materials should be placed in the freezer as soon as possible after water damage. Books will dry best if their bindings are supported firmly to inhibit initial swelling. The equipment should have the capacity to freeze very quickly, and temperatures must be below -10 to -40 degrees F. to reduce distortion and to facilitate drying. Documents may be placed in the freezer in stacks or may be spread out for faster drying. Expect this method to take from several weeks to several months, depending upon the temperature of the freezer and the extent of the water damage. Coated paper may adhere with this technique.

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APPENDIX B - 2

AIR DRYING WET BOOKS[1]

The main objective in the air drying of wet books is to remove water as efficiently as possible and, at the same time, contain structure distortion. Structure distortion (i.e., excessive swelling of the fore-edge area, concavity of the backbone) can be avoided if proper judgment is used in determining the appropriate point at which the book should be opened. The following procedures assume that the covers are in good condition and still attached to the book. If the covers must be removed (because of delamination, color running out of the binding materials, board swelling and warping, etc.), the book should be stood on edge as described below, but supported by loose pieces of binder's board, blocks of wood, or bookends. (See other cautions at the end of this section.)

NOTE: Depending on the degree of saturation, a book can take from one day up to a week to dry.

1. Books That Are Thoroughly Wet

Do not attempt to open. Do not attempt to fan leaves. Do not remove covers.

Place book in a closed position (with boards slightly open) on its head on sheets of absorbent paper. To permit water to drain efficiently, place small pieces of binder's board at the fore-edge. Place absorbent sheets of paper between the text block and the binding. Change paper on the table as it becomes wet. Providing that the books are placed in a moving current of air, they should soon dry to the point where they may be opened for the next step.

2. Books That Are Partially Wet

Books may be carefully opened partially (at a fairly shallow angle) and interleaved with absorbent paper. Paper towels are ideal for this purpose. Begin at the back of the book and interleave every 20 or so leaves. Given good drying conditions, the book may be left flat until the interleaving material has absorbed some of the water, probably after one hour. Change interleaf material periodically until book is only very slightly damp, then go to step 3.

3. Books That Are Damp

Books that are damp should be stood on edge, lightly fanned, and allowed to dry in a current of air. If the binding is damper than the text, place paper between the boards and the book. When almost dry, go to next step.

4. Books That Are Almost Dry

When almost dry, lay the book flat, push the back and boards gently into position, and place under a light weight, leave in this position until book is thoroughly dry.

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CAUTION:

1. Coated paper (shiny paper used for periodicals and art books and occasional illustrations) requires immediate attention - once the paper starts to dry it fuses together and can rarely be separated. It may be possible to salvage the item by interleaving every sheet with changes of wax paper. If time or staff are not available for this, make arrangement to freeze the book and KEEP IT WET until it is placed in the freezer.

2. Manuscripts or books printed or bound in vellum or leather DO NOT AIR DRY except under the direction of a specialist.

1 Taken from Cornell University Library Disaster Response Plan.

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APPENDIX B - 3

AIR-DRYING WET RECORDS[1]

Wet records may be air-dried if care is taken to follow guidelines suggested by preservation experts. The technique is most suitable for small numbers of records which are damp or water-damaged only around the edges. If there are hundreds of single pages, or if the water damage is severe, other methods of drying will be more satisfactory and cost-effective. Stacks of documents on coated, or shiny paper must be separated immediately to prevent adhesion. Or they must be frozen to await a later drying decision. Care must be taken with water soluble inks as well. Records with running or blurred inks should be frozen immediately to preserve the written record. Conservators can then be contacted for advice and assistance. If records must be air-dried, the following steps will help achieve satisfactory results. Wet paper is extremely fragile and easily torn or damaged, so care must be exercised. Once wet, records will never look the same, and at least some cockling or distortion should be expected.

Equipment needed: flat surfaces for drying, fans and extension cords, clotheslines, sheets of polyester film.

1. Secure a clean, dry environment where the temperature and humidity are as low as possible. For best results, the temperature must be below 70 degrees F. and the humidity below 50 percent, or mildew will develop and distortion will be extreme.

2. Keep the air moving at all times using the fans in the drying area. This will accelerate the drying process and discourage the growth of mildew. If materials are dried outside, do not expose them to direct sunlight as it may fade inks, accelerate the aging of paper, and encourage the growth of mildew. Be aware that breezes can blow away single records. Train fans into the air and away from the drying records.

3. Single pages can be laid out on tables, floors, and other flat surfaces protected if necessary by paper towels or clean, unprinted newsheets. Or clotheslines may be strung close together and records laid across them for drying.

4. If records are printed on coated paper they must be separated from one another to prevent them from sticking together. This is a tedious process which requires skill and patience. Practice ahead of time will prove useful in case of emergency. Place a piece of polyester film on the stack of records. Rub it gently down on the top document. Then slowly lift the film while at the same time peel off the top sheet. Hang the polyester film up to dry on the clothesline using clothespins. As the record dries, it will lift itself from the surface of the film. Before it falls, remove it and allow it to finish drying on a flat surface.

5. Once dry, records may be rehoused in clean folders and boxes. Or they may be photocopied or reformatted on microfilm or fiche. Dried records will always occupy more space than ones which have not been water-damaged.

1 Taken from the New York State Library Disaster Plan Guidelines for Library and Archival Collections produced by Sally Buchanan, Conservation Consultant, as part of a disaster preparedness pilot project sponsored by the New York State Library.

APPENDIX B - 4

RECOVERY TECHNIQUES FOR NON-PRINT MATERIALS[1]

[Adapted, with additions, from Betty Walsh, Western Association for Art Conservation Newsletter (May 1988)]

1. Magnetic Media

Consider all forms of magnetic media not salvageable except, possibly, floppy diskettes; routine backups give the best probability of saving data on magnetic media. Never store the backups in the same location as the originals or they may be destroyed by the same disaster. Backup software programs as well as the data discs.

Diskettes should be removed from their jackets, washed, and dried. Cut the edge of the jacket with non-magnetic scissors and remove the diskette with gloved hands. Wash in several water baths (photo trays) of distilled water, and dry with lint free towels. When the crisis is over, insert the diskettes into a new jacket (cannibalized from a new diskette; this can be reused) and copy with a disk drive. The drive heads should be cleaned frequently.

2. Sound and Video Recordings

Phonodiscs

Remove the discs from their sleeves and jackets. If labels have separated, mark the center of disc with a grease pencil and keep track of the label. Jackets, sleeves, and labels may be dried like other paper materials. If dirt has been deposited on the discs, they may be washed in a 10% solution of Kodak Photo Flo in distilled water. Air dry the discs on supports that permit free circulation of air.

Reel to reel tapes

If the exterior of the tape is dirty, wash the tape (still would be on its reel) with lukewarm water. Support the tape vertically and air dry it, or air dry by laying it on sheets of newsprint spread over plastic covered tables. The box can be air dried as well. If the reels are still dirty, remove the tape and wash the reel with detergent and water. An alternative is to replace the reel. Return the tape to its original box, after the box has dried. Replace the box if badly damaged.

Videocassettes

Dismantle the cassette and dry as for reel to reel tapes.

Audio cassettes

If there are no master copies, dismantle the cassette and air dry the tape as above. Rerecord the tape after drying. It is difficult to determine the condition of sealed cassettes. Copy them in any case.

3. Optical Media (Laser videodiscs, CD-ROMs, CDs)

Until further information is available for optical media, follow directions for phonodiscs, except don't use Kodak Photo Flo. CD formats tend to be less sensitive to moisture than magnetic media, but they are sensitive to heat (fire or catastrophic failure of HVAC system) and must be cleaned thoroughly before attempting playback in the event that they are wet with anything other than distilled water. Small deposits on the surface of a disc can cause loss or loss of access to information.

4. Photographic Materials

The first priority is to dry wet collodion photographs and daguerreotypes. The recovery rate may not be very high.

Case photographs

Remove the assembly from the case. Carefully fold back the preserver frame, cut the sealing tape (if present) and take the assembly apart. Place daguerreotypes face up on blotters with the case components beside them. Wet collodion photographs should be dried in a similar way, emulsion side up.

Wet collodion glass negatives and unmounted case photographs

Dry emulsion side up on blotters.

Prints, negatives and transparencies

In order of preference, the drying methods are: air dry, freeze, thaw and air dry, and freeze dry. Vacuum drying will make the photographs stick together before air drying or freezing. Time and facilities may modify the following:

Black and white prints and negatives

Wash for half an hour in changes of cold water. Gently swab off stubborn dirt from the surface. Rinse with Kodak Photo Flo solution.

Color prints

Wash as above, but for a shorter time.

Color negatives and transparencies

Wash as for black and white negatives. A few varieties require bathing in a stabilizer prior to drying.

Color negatives

Rinse for 1 minute using Kodak C41 stabilizer.

Ektachrome Transparencies

Rinse 10 - 15 seconds in Kodak E6 stabilizer.

Kodachrome

No stabilizer required.

Eastman Color Film

Send to a Kodak Laboratory.

Air drying - remember to keep the photographs wet until they are separated from each other and their enclosures. If the photographs have been previously frozen, thaw them. If it appears that the photographs could dry and stick together during thawing, immerse again in cold water. Dry the photographs emulsion side up on blotters, paper or nylon screen.

5. Microforms

Microfilm strips in jackets

Cut the strips from the jackets with sleeve cutters. Wash and dry the film and insert into new jackets.

Diazo microfiche and microfilm

Check for readability. If the photograph has blistered, discard and replace with a print from the security copy. If it has not delaminated, wash in cool water and dry on blotters or a lint-free cloth.

Silver-Gelatin Type Microfilm

Label as wet film and ship to a microfilm processor.

6. Paintings

Ideally, this treatment should be done by a conservator. Contact Dr. Christopher Tahk in the Art Conservation Department at x5025. Initially, set up tabletops padded with blotters and covered with plastic.

Separate the merely wet paintings from those showing structural damage. Signs of structural damage are tears in the canvas, flaking, lifting, and dissolving of paint and ground layers. Let the structurally damaged paintings dry, face up in a horizontal position, on the tables.

Structurally sound paintings on canvas are dried in the following way: Set up several more layers of blotter on the table, followed by a layer of tissue paper. Unframe the painting, but don't remove it from its stretcher. Lay it face down on this surface, making sure the tissue is not wrinkled. Cut blotters to the inside dimensions of the stretcher frame. Cut a sheet of plywood or thick masonite to the same dimensions, or smaller to fit inside the stretcher keys. Cover the back of the canvas with a blotter (if the canvas is large and more than one blotter is necessary, butt the blotters end-to-end), then the board, and finally weights. Change the blotter until the canvas is dry. If the tissue on the front has any tendency to stick to the paint layer, leave it in place.

1 Taken from the Cornell University Disaster Response Plan.

RECORD OF DISASTER RECOVERY ACTIVITIES FOR LIBRARY AND ARCHIVAL COLLECTIONS[1]

The New York State Library is keeping a record of disasters involving library and archival materials. If you have such a disaster, please forward this information to the New York State Conservation/Preservation Program, New York State Library, 10-C-47 Cultural Education Center, Albany, NY 12230. Thank you for your cooperation.

Reporting Date:

Name of person filing report:

Institution:

Address:

Telephone #: ( ) -

Date of Disaster:

Nature of disaster: flood____ leaking roof____ burst pipe____ fire ____

other, please specify_____

_____

What type of material was damaged or affected? Please indicate the quantity of material affected in the space provided next to each category of material.

books_____ photographs_____manuscripts_____videotapes_____

periodicals_____microfilm_____catalogue cards_____

other_____

Indicate the level and type of damage to materials by writing a percentage of the total volume involved in the disaster next to each category below.

burned and completely lost_____saturated with water_____

damp but not saturated_____soiled and saturated_____

moldy_____

other, please specify_____

_____ _____

_____

What did you do?

implemented salvage operation _____ called NEDCC for assistance _____

other_____.

_____.

_____

If you called someone for assistance, was the assistance helpful?_____

not helpful_____ If not, why_____

_____

_____

What additional help did you need? _____

_____

_____

Did your organization have a formal disaster plan? yes_____no_____

If so, did it help you respond effectively? yes_____no_____

If not, why_____

_____

May we share the information on this form with others? yes_____no_____

1 Taken from the New York State Library Disaster Plan Guidelines for Library and Archival Collections produced by Sally Buchanan, Conservation Consultant as part of a disaster preparedness pilot project sponsored by the New York State Library.